

Notice of Allowability

Application No.

10/021,338

Examiner

Stephen Gucker

Applicant(s)

FEINSTEIN ET AL.

Art Unit

1647

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 3/15/04.
2. ☒ The allowed claim(s) is/are 46-48 and 25-26, renumbered as 1-5, respectively.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 6/11/02
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment *same document*
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT & REASONS FOR ALLOWANCE

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with John P. White on 5/27/04.

An examiner's amendment to the record appears below.

In the claims:

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Cancelled claims 1-24 and 27-45.

Amended claims 25-26.

~~3~~^{1 2} 25. (Amended) The method or process of claim [23] ~~46~~¹ or ~~47~~² wherein the cells endogenously express the KIAA0538 gene.

~~4~~^{1 2} 26. (Amended) The method or process of claim [23] ~~46~~¹ or ~~47~~² wherein the cells are neuronal cells.

Added new claims 46-48:

~~1~~¹ 46. (New) A method of identifying a neuroprotective compound comprising testing the ability of the compound to inhibit the activity of a Ca^{+2} promoted Ras inactivator encoded by a member of the KIAA0538 gene family, said inactivator being encoded by a nucleic acid sequence comprising SEQ ID NO:94, whereby if the compound inhibits the activity of said inactivator, it is identified as being a neuroprotective compound.

~~2~~² 47. (New) A process for identifying a neuroprotective compound which specifically inhibits the activity of the polypeptide product of the KIAA0538 gene, said

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polypeptide product being encoded by a nucleic acid sequence comprising SEQ ID

NO:94, comprising:

(a) contacting cells expressing DNA encoding the KIAA0538 gene under conditions permitting expression of the DNA; and

(b) determining if the compound inhibits the activity of the polypeptide product as compared to a control, thereby identifying a compound as neuroprotective.

~~34~~²8. (New) The process of claim ~~47~~² wherein the cells are transfected with a nucleic acid comprising the sequence of SEQ ID NO:94.

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2. The following is an examiner's statement of reasons for allowance: the closest prior art of record is Signore et al. which disclose the immunohistochemical localization of the GTPase-activating protein GAP1^{IP4BP}, but Signore et al. do not anticipate or render obvious the instant invention of a process for identifying neuroprotective compounds by screening for a compound that could inhibit the activity of a Ca⁺² promoted Ras inactivator encoded by a member of the KIAA0538 gene family, said inactivator being encoded by a nucleic acid sequence comprising SEQ ID NO:94, because Signore et al. do not teach any functional relationship between the GTPase-activating protein GAP1^{IP4BP} and neuronal cell death of neurons undergoing stress.

Additionally, Lockyer et al. teach the calcium dependence of the inactivation of the Ras-MAPK pathway by CAPRI, but do not relate this inactivation to increased neuronal cell death of "stressed" neurons, or the inhibition of this inactivation as a method by which neuroprotective compounds could be assayed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technical Center 1600 general number which is (571) 272-1600.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Gucker whose telephone number is (571) 272-0883. The examiner can normally be reached on Monday to Friday from 0930 to 1800. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Kunz, can be reached at (571) 272-0887. The fax phone number for this Group is currently (703) 872-9306.

SG

Stephen Gucker

May 31, 2004

Gary L. Kunz
GARY KUNZ
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